

CLAIMS

1. A voltage detecting circuit comprising:

an input voltage comparing circuit that controls opening and closing of an output switching element in response to an output of the comparison of a first threshold value voltage or a second threshold value voltage lower than the first threshold value voltage with an input voltage, and that selects the second threshold value voltage when the input voltage changes from a low voltage to a high voltage and intersects the first threshold value voltage and selects the first threshold value voltage when the input voltage changes from the high voltage to the low voltage and intersects the second threshold value voltage; and

a threshold value voltage forcibly setting circuit that compares a third threshold value voltage lower than the second threshold value voltage with the input voltage and, when the input voltage changes from a low voltage to a high voltage and intersects the third threshold value voltage, outputs a pulse for a predetermined period thereafter so that the second threshold value is forcibly selected in the input voltage comparing circuit,

the second threshold value voltage being compared with the input voltage in the input voltage comparing circuit when the input voltage rises up.

2. The voltage detecting circuit according to claim 1, wherein

the threshold value voltage forcibly setting circuit selects a fourth threshold value voltage lower than the third threshold value voltage when the input voltage changes from a low voltage to a high voltage and intersects the third threshold value voltage, and selects the third threshold value voltage when the input voltage changes from a high voltage to a low voltage and intersects the fourth threshold value voltage.

3. A battery device comprising:

the voltage detecting circuit according to claims 1 or 2;

series-connected resistors for generating the input voltage of the voltage detecting circuit, the series-connected resistors having one end grounded; and

a battery connected to the other end of the series-connected resistors.